

Application No.: 10/026,171
Response dated: March 7, 2005
Reply to Office Action of December 10, 2004

REMARKS

Reconsideration of the present claims, in light of the above claim clarifications and the Remarks which follow, is respectfully requested.

Claims now before the Examiner are 1-12, and 13-35.

Support for the new claims is found as follows:

Claim element to heating metallocene and activator starting at 65°C or an upper limit of 75°C paragraph [0101], example 4, page 24, and paragraph [0102], example 5, page 24, respectively. Carrier temperatures of 30-75°C and 65-75°C, may be found at paragraph [0061], page 16 and at the same locations above for the heating of the metallocene and activator.

The numbering in this Response will follow that of the Examiner's Action.

1. No response necessary.

Claim Objections

2. Claims 5, 6, 9, 23, 24 and 26 are objected to. All of the Examiner's Objections have been addressed. Withdrawal of the Objections is respectfully requested.

Rejections under 35 USC § 112

3. Claims 6, 14, 22-25 and 27-29 stand Rejected under 35 USC § 112, second paragraph.

These claims have been amended. Withdrawal of the Rejections is respectfully requested.

Rejections under 35 USC § 102

4. & 5. Claims 1-7, 10-12, 14-16 and 18-25 stand rejected under 35 USC §102 (b) as anticipated by WO 96/35729 (Razavi I).

Applicants maintain that Razavi I does not disclose heating the metallocene and activator to temperatures above 50°C. Absent such disclosure, no Anticipation exists.

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6. Claims 1-7, 10-12, 14-16 and 18-24 stand Rejected under 35 USC §102(e) as anticipated by US 5,914,289 (Razavi II).

Applicants maintain that Razavi II does not disclose heating the metallocene and activator to temperatures above 50°C. Absent such disclosure, no Anticipation exists.

Withdrawal of the Rejections is respectfully requested.

Rejection Under 35 USC § 103

7. & 8. Claims 1-12 and 14-29 stand Rejected under 35 USC § 103(a) as Obvious over each of Razavi I and Razavi II.

Applicants believe that the Examiner is misconstruing the Razavi documents. Specifically, in Razavi, as in the presently claimed invention, two separate processes are being carried out. The first is the combination, or more specifically the reaction of the metallocene and the activator, to form a reaction product. The second is the combination of the previously combined metallocene/activator reaction product with a carrier. Two separate chemical reactions are taking place. Razavi (both I and II) acknowledges this fact as does the present specification. At page 7, lines 3- 11, Razavi I states "The reaction between the metallocene and the alumoxane (step a) is a multi step equilibrium type reaction involving mono- and di- alkylation of the metallocene, mono-, di-, or multi metallic species and finally abstraction of an alkyl group, and formation of active cationic species. The reaction between the metallocene and the alumoxane is performed at a temperature comprised between 15 and 50°C, preferably about 25°C." If Razavi I perceived benefit from higher temperatures for this reaction (between the metallocene and the alumoxane (step a)), they are not disclosed or suggested, and in fact, if higher temperatures even within the disclosed range were preferred, they were not so stated. The difference between the two (the Razavi documents and the present Specification), as regards the first step, is temperature. The present claims are outside the temperature range disclosed by both Razavi documents for the first step.

Applicants have found significant benefit in terms of reduced fouling and/or increased catalyst efficacy. The Examiner makes the point (see Examiner's Answer) that the skilled person would expect that increasing the temperature would *ipso facto* result in more catalyst productivity. Applicants do not agree. Applicants are skilled catalyst

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chemists and engineers, with decades of experience and they found this (heating of metallocene and activator above 50°C) to have unexpected and surprising results. Furthermore, the Examiner has stated in other cases that the catalyst arts are unpredictable. Additionally, the Examiner has stated that the skilled person would find it obvious to apply their skill to the disclosure of Razavi I "... with a reasonable expectation of obtaining a highly-useful method for making a supported metallocene catalyst with the expected benefit of higher catalyst activity with lesser reactor fouling." Missing from this analysis is the motivation to change Razavi I. At best, the Examiner's statement would amount to an "obvious to try" route, an impermissible standard for obviousness.

Therefore, absent any disclosure or suggestion in Razavi I to a higher temperature (as in the present claims) for the metallocene/alumoxane reaction, and absent any motivation from Razavi (I or II) to increase the metallocene alumoxane reaction temperature, the claims are not rendered Obvious by Razavi I or II. Withdrawal of the Rejections is respectfully requested.

The claims are in condition for allowance.

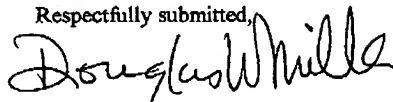
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Respectfully submitted,

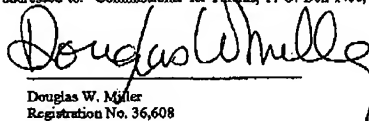


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